

REMARKS

Reconsideration of the above-identified application in view of the foregoing amendments and following remarks is respectfully requested.

A. Claim Status / Explanation of Amendments

Claims 1, 3-7, and 9-12 are pending and were rejected. As to matters of form, claim 1 was objected to for reciting a first or second "reading method" throughout. The Office Action further objected to claim 1, contending that "the barycenters" on line 10 should read "barycenters" and that "barycenters" on line 17 should read "the barycenters." In addition, claim 4 is objected to for reciting the "second reading mode." [10/30/07 Office Action, p. 2]. The Office Action objected to claim 7, contending that "the barycenters" on line 8 should read "barycenters" and that "barycenters" on line 12 should be changed to "the barycenters." [10/30/07 Office Action, p. 3]. Claims 1 and 7 are amended as suggested by the Office Action while the recitation of a "second reading mode" has been deleted from claim 4, thereby rendering the objection to these claims as moot.

As to the merits, claims 1, 3, 6, 7, and 9 were rejected pursuant to 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,765,616 to Nakano, et al. ("Nakano"). [10/30/07 Office Action, p. 3]. Claims 4 and 10 were rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of U.S. Patent No. 6,661,451 to Kijima, et al. ("Kijima"). [10/30/07 Office Action, p. 5]. Claim 12 was rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of U.S. Patent No. 7,145,5981 to Maeda ("Maeda"). [10/30/07 Office Action, p. 7]. Claims 5 and 11 were rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Kijima and further in view of U.S. Patent No. 6,630,965 to Xue, et al. ("Xue"). [10/30/07 Office Action, p. 7].

By this paper, claims 1, 4, 7, and 10 are amended. In addition to the formal changes noted above, claims 1 and 7 are amended to incorporate the limitation wherein photoelectric conversion elements of a same color are added "in every other line" in a second reading mode/method with this same limitation being deleted from claims 4 and 10. Claims 1 and 7 are further amended to recite, *inter alia*, limitations pertaining to "reading signals in one scan" and "a color order of the added signals being the same as a color order of the signals before being added." Support for the changes to claims 1 and 7 can be found throughout the application as originally filed including, for example, Figs. 2A-2B and 4A-4B along with accompanying descriptive text.

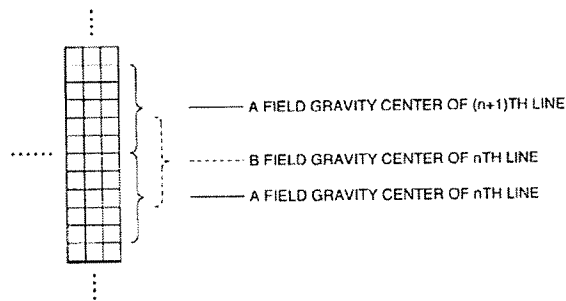
No new matter will be introduced into this application by entry of these amendments. Entry is respectfully requested.

B. Claims 1, 3, 6-7, and 9 are Not Anticipated by Nakano

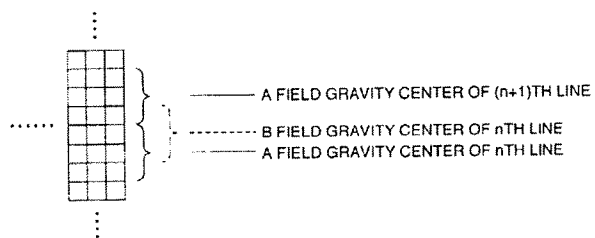
Applicant respectfully traverses the rejection of claims 1, 3, 6-7, and 9 as allegedly being anticipated by Nakano. As set forth in detail below, Nakano does not teach, disclose, or suggest each and every element of these claims. Accordingly, the Section 102(e) rejection should be withdrawn.

The Office Action recognizes and asserts that Nakano fails to teach the limitation wherein "signals generated by the photoelectric conversion elements of the same color in every other line are added in the second reading method" as recited in Applicant's original claims 4 and 10. [10/30/07 Office Action, p. 6]. Applicant has amended independent claims 1 and 7 to include the above limitation, thereby distinguishing claims 1 and 7 from Nakano. Applicant has further amended claims 1 and 7 to recite, *inter alia*, a "second reading mode of reading signals in one scan." Nakano, on the other hand, clearly shows in Figs. 6 and 8 (reproduced below) that the

scan is performed twice (e.g., A and B fields) with the deviation between lines being the result of the dual scans. In each individual scan the barycenters of lines are equally distributed, therefore obviating the need to correct the signals read in one scan such that the spatial distances between the barycenters becomes equal. Consequently Nakano also fails to disclose the limitation wherein signals are read in a single scan in a second reading mode, thereby further differentiating claims 1 and 7 from Nakano.



[Nakano, Fig. 6].



[Nakano, Fig. 8].

Since original claims 4 and 10 were rejected by the Office Action as allegedly being obvious over Nakano in view of Kijima, the obviousness rejection is overcome and traversed on the merits as follows. [10/30/07 Office Action, p. 5]. The Office Action contends it would have been obvious to modify Nakano such that signals generated by the photoelectric conversion elements of the same color in every other line are added as allegedly disclosed by Kijima. [10/30/07 Office Action, p. 6]. However, Applicant's own review of Kijima shows that Kijima fails to teach, disclose, or suggest a second reading mode of "reading signals in one scan by adding ... photoelectric conversion elements of a same color in every other line" as recited in Applicant's amended claims 1 and 7.

Applicant further respectfully disagrees with the Office Action and asserts that it would not have been obvious to combine Nakano and Kijima to obtain Applicant's signal processing apparatus. Nakano is directed to electric recording devices which utilize a solid-state image

sensing device with a large number of pixels. [Nakano, Col. 2, lns. 46-50]. A primary object of Nakano is to provide an electric camera which:

...uses an image sensing device with a sufficient number of pixels for still images and enables taking of highly detailed still images and a moving video taking with reduced image quality degradation without increasing circuitry such as field memory. [Nakano, Col. 2, ln. 66 to Col. 3, ln. 3].

Thus, Nakano discloses an image sensing device capable of taking highly detailed still images while still being able to produce satisfactory video quality. Kijima, in a similar field of endeavor, is directed to an electronic imaging apparatus which:

...is capable of displaying an image which is recognized as a dynamic image in a non-photographing mode even with a relatively low operation frequency, for example, 20 MHz or lower. [Kijima, Col. 1, lns. 58-61].

Applicant, on the other hand, is directed to an image processing apparatus wherein barycenter deviation correction is performed to facilitate using the same camera signal processes (e.g., obtaining luminance and color difference signals) on signals obtained from both the first (non-addition) and second (addition) reading modes. Thus, the signal processing apparatus disclosed by Applicant serves a purpose which is completely different from the imaging apparatus disclosed by either Nakano or Kijima.

Thus, Applicant respectfully asserts that it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine Nakano and Kijima in order to conceptualize Applicant's signal processing apparatus. In supporting this assertion, Applicant notes that the Office Action previously recognized that Kijima does not teach a correction unit that "corrects positions of barycenters of the inputted signals when the second reading method is set" as recited in Applicant's original claim 1. [5/29/07 Office Action, p. 4]. Moreover, as noted above, the Office Action has also acknowledged that Nakano fails to teach the limitation wherein

the "signals generated by the photoelectric conversion elements of the same color in every other line are added in the second reading method." [10/30/07 Office Action, p. 6]. Since Applicant's amended claims 1 and 7 comprise each of these elements and considering that the prior art presents absolutely no teaching, suggestion, or motivation for combining Nakano and Kijima to obtain Applicant's signal processing apparatus, amended claims 1 and 7 are asserted to be patentably distinct over the prior art of record.

Accordingly, Nakano and Kijima - whether alone or in combination - fail to teach, disclose, or suggest, *inter alia*, a signal processing apparatus comprising a "second reading mode of reading signals in one scan by adding signals ... corresponding to the photoelectric conversion elements of a same color in every other line" as recited in Applicant's amended claim 1. Applicant submits claim 1 is patentably distinct from Nakano and Kijima for at least this reason. Claim 1 is directed to a signal processing apparatus whereas independent claim 7 discloses a signal processing method and, as such, claim 7 is asserted to be patentably distinct for at least similar reasons. Since claims 3, 6, and 9 depend from claims 1 or 7 they are all allowable for the same additional independent reasons set forth with respect to claims 1 and 7. Accordingly, the Section 102 rejection of claims 1, 3, 6-7, and 9 should be withdrawn.

C. Claims 4-5 and 10-12 are Patentable over Nakano in view of the Cited References

Applicant respectfully traverses the rejection of claims 4-5 and 10-12 under 35 U.S.C. § 103(a) as allegedly being unpatentable for obviousness over Nakano in view of various combinations of Kijima, Maeda, and Xue. For at least similar reasons as stated above and for the secondary, tertiary, and quaternary references failing to overcome the deficiencies of the primary reference, claims 4-5 and 10-12 are asserted to be patentably distinct. Accordingly, Applicant respectfully traverses the Section 103 rejection of claims 4-5 and 10-12 over Nakano in view of

Kijima, Maeda, or Xue. Applicant respectfully submits that all of the pending claims are now allowable for the above reasons and early, favorable action in that regard is requested.

Applicant has chosen in the interest of expediting prosecution of this patent application to distinguish the cited documents from the pending claims as set forth above. These statements should not be regarded in any way as admissions that the cited documents are, in fact, prior art. Likewise, Applicant has chosen not to swear behind the references cited by the Office Action, or to otherwise submit evidence to traverse the rejection at this time. Applicant, however, reserves the right, as provided by 37 C.F.R. §§ 1.131 and 1.132, to do so in the future as appropriate. Furthermore, Applicant has not specifically addressed the rejections of the dependent claims. Applicant respectfully submits that the independent claims, from which they depend, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicant, however, reserves the right to address such rejections of the dependent claims in the future as appropriate.

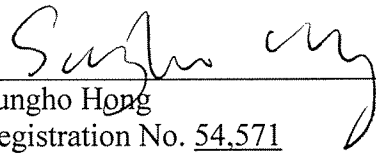
CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is earnestly solicited. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-5181.

Respectfully submitted,
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Dated: January 30, 2008

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